DOCUMENT RESUME

ED 263 424 CE 042 972

TITLE	Math on the Job. Accounting Clerk/Bookkeeper.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	Office of Special Education and Rehabilitative Services (ED), Washington, DC.
PUB DATE	85
GRANT	G008300003
NOTE	26p.; For the other booklets in this series, see CE 042 963-994.
PUB TYPE	Guides - Classroom Use - Materials (For Learner) (051)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Accounting; *Bookkeeping; *Career Awareness; Career Education; Clerical Occupations; *Disabilities; Emotional Disturbances; Enrichment Activities; Learning Disabilities; *Mathematics Skills; Mental Retardation; Occupational Information; Secondary Education; Skill Development; Special Education; *Work Environment

ABSTRACT

This booklet is intended to help mainstreamed mentally retarded, emotionally disturbed, or learning disabled high school students acquire a basic understanding of the responsibilities and working conditions of accounting clerks and bookkeepers and to practice basic math skills necessary in the occupation. The first section provides a brief introduction to the occupation by focusing upon those job tasks of accounting clerks and bookkeepers with which the student is likely to be familiar. The next two sections deal with the work environment of the typical accounting clerk or bookkeeper and the training, education, and experience needed for the occupation. Exercises addressing basic math skills used by accounting clerks and bookkeepers are provided. Various suggestions are listed for students interested in further exploring the occupation of accounting clerk or bookkeeper. A glossary and answer sheet conclude the booklet. (MN)

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MATH on the job

Accounting Clerk/Bookkeeper

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MATH ON THE JOB:

ACCOUNTING CLERK/BOOKKEEPER

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MATH on the job

Accounting Clerk/Bookkeeper

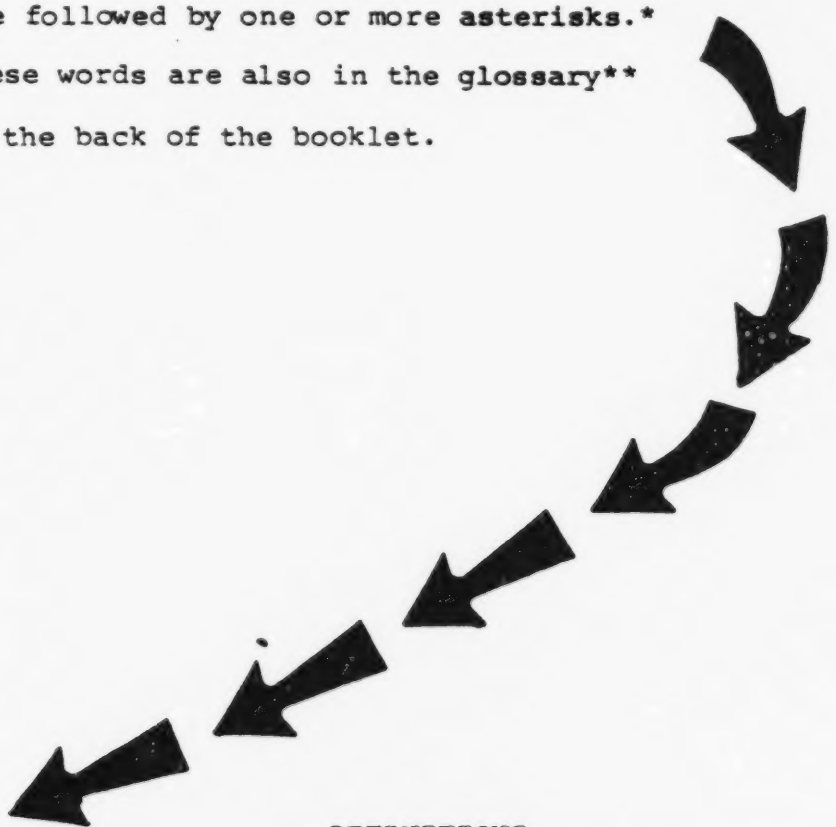
In this booklet, you can--

- find out what an accounting clerk/bookkeeper does
- see how an accounting clerk/bookkeeper uses math
- get a chance to use math as an accounting clerk/bookkeeper
- find out the types of things an accounting clerk/bookkeeper needs to know
- find out what courses, training, and experience you need to become an accounting clerk/bookkeeper

SPECIAL WORDS USED IN THIS BOOKLET

Workers in many jobs use special words or special meanings for words. Learning these words helps you to learn about a job.

You will find some of these special words in this booklet. When these words, and some hard words, are used for the first time, they are followed by one or more **asterisks.*** These words are also in the **glossary**** at the back of the booklet.



DEFINITIONS

*An asterisk (*) is a symbol that tells you to look at the bottom of the page for the meaning, or definition, of the word.

**A glossary is a list of words with their meanings.

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HAVE YOU EVER...

- kept a written record of the amount of money you spent?
- watched a relative write a check to pay a bill?
- used a **calculator*** to add a column of numbers?
- watched a relative make out a **budget****?

If you have, then you have some idea about the work of an accounting clerk/bookkeeper. This booklet will help you learn more about the work of an accounting clerk/bookkeeper and how math is important to do the job.

DEFINITIONS

*A calculator is a machine used to figure out the answer to math problems.

**A budget is a written plan that helps you spend your money or time wisely.

WHAT DOES AN ACCOUNTING CLERK/ BOOKKEEPER DO?

The main task of an accounting clerk/bookkeeper is to keep **financial records***. How does an accounting clerk/bookkeeper do this? As an accounting clerk, you--

- write details of business transactions in financial records
- total accounts
- calculate and record charges
- prepare invoices, statements, and reports
- make bank statements agree with financial records
- figure employee wages
- prepare bank deposits and withdrawals

DEFINITION

*Financial records are papers, books, and reports having to do with money.

An accounting clerk/bookkeeper uses math on the job every day. As an accounting clerk/bookkeeper, you will use math to--

- read and write whole numbers, decimals, and percentages
- add, subtract, multiply, and divide
- compare numbers
- calculate percentages
- prepare bills, statements, and reports
- figure deductions from employee wages
- prepare paychecks

An accounting clerk/bookkeeper uses math to figure out how much a business is worth.

EXAMPLE

Assets are anything that a business owns and is worth money, including such things as cash, furniture, and office equipment. Liabilities are any monies or debts that a business might owe. And owner's equity is the owner's financial interest in a business.

To figure out the assets, liabilities, and owner's equity of a business, an accounting clerk/bookkeeper uses the following accounting equation:

Assets = Liabilities + Owner's Equity

If a business has $14,000 in assets and $2,000 in liabilities, how much is the owner's equity? To figure this amount, substitute the assets and liabilities amounts into the accounting equation and solve for the owner's equity:

Assets	=	Liabilities	+	Owner's Equity
$14,000	=	$2,000	+	?

The owner's equity is $12,000.

NOW YOU TRY IT

Practice Exercise A

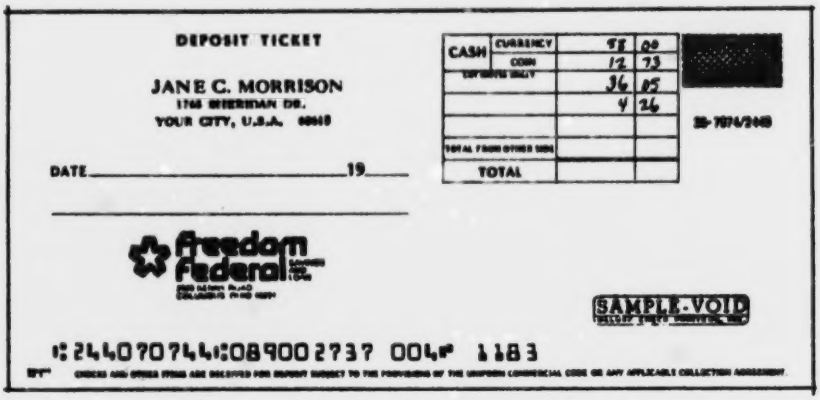
Find the missing amount in each of the following accounting equations.

	Assets	=	Liabilities	+	Owner's Equity
1.	$400	=	$ 50	+	$?
2.	800	=	520	+	?
3.	775	=	320	+	?
4.	660	=	?	+	460
5.	1,490	=	?	+	410
6.	?	=	175	+	1,200
7.	?	=	270	+	780
8.	1,745	=	635	+	?
9.	8,470	=	0	+	?
10.	3,635	=	890	+	?

An accounting clerk/bookkeepter uses math to fill out deposit slips.

EXAMPLE

One of the tasks of an accounting clerk/bookkeeper is to prepare bank deposit slips like the one below.


DEPOSIT TICKET

JANE C. MORRISON
1765 MERIDIAN DR.
YOUR CITY, U.S.A.

DATE _____ 19____

CASH	CURRENCY	58	00
	COIN	12	73
		36	05
		4	26
TOTAL			

Freedom Federal

SAMPLE-VOID

⑆244070744⑆08900273? 004⑈ 1183

In this example, what is the total amount of money being deposited?

To find the total, add the amounts listed in the Dollars and Cents columns of the deposit slip.

$$\begin{array}{rr} \$ & 58.00 \\ & 12.73 \\ & 36.05 \\ + & 4.26 \\ \hline \$ & 111.04 \end{array}$$

The total amount of money being deposited is $111.04.

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Practice Exercise B

Find the total amount of each deposit shown below.

11.

CASH	CURRENCY	97	50
	COIN	100	00
LIST CHECKS SINGLY		14	75
		21	00
		3	00
TOTAL FROM OTHER SIDE			
TOTAL			

12.

CASH	CURRENCY	84	00
	COIN	102	00
LIST CHECKS SINGLY		57	50
		86	50
TOTAL FROM OTHER SIDE			
TOTAL			

13.

CASH	CURRENCY	250	00
	COIN	11	75
LIST CHECKS SINGLY		12	25
		101	60
		36	00
TOTAL FROM OTHER SIDE			
TOTAL			

14.

CASH	CURRENCY	69	72
	COIN	108	50
LIST CHECKS SINGLY		97	10
		30	53
TOTAL FROM OTHER SIDE			
TOTAL			

15.

CASH	CURRENCY	139	50
	COIN	476	80
LIST CHECKS SINGLY		294	72
		100	16
TOTAL FROM OTHER SIDE			
TOTAL			

16.

CASH	CURRENCY	14	17
	COIN	25	08
LIST CHECKS SINGLY		347	70
		532	52
		474	27
TOTAL FROM OTHER SIDE			
TOTAL			

17.

CASH	CURRENCY	67	42
	COIN	72	80
LIST CHECKS SINGLY		800	00
		301	15
		746	64
TOTAL FROM OTHER SIDE			
TOTAL			

18.

CASH	CURRENCY	85	37
	COIN	14	95
LIST CHECKS SINGLY		73	11
		955	13
			79
TOTAL FROM OTHER SIDE			
TOTAL			

19.

CASH	CURRENCY	615	75
	COIN	615	75
LIST CHECKS SINGLY		713	89
		811	98
		919	99
TOTAL FROM OTHER SIDE			
TOTAL			

20.

CASH	CURRENCY	1,000	00
	COIN	757	53
LIST CHECKS SINGLY		872	50
		906	15
		1,111	00
TOTAL FROM OTHER SIDE			
TOTAL			

21.

CASH	CURRENCY	1,179	80
	COIN	802	50
LIST CHECKS SINGLY		984	16
		889	70
TOTAL FROM OTHER SIDE			
TOTAL			

22.

CASH	CURRENCY	889	70
	COIN	984	16
LIST CHECKS SINGLY		802	50
		1,179	80
TOTAL FROM OTHER SIDE			
TOTAL			

An accounting clerk/bookkeeper uses math to figure out the weekly **gross income*** for employees paid by the hour.

EXAMPLE

An accounting clerk/bookkeeper must figure out, or compute, an employee's gross income each week. To figure out gross income, an accounting clerk/bookkeeper multiplies the employee's hourly rate by the number of hours the employee worked.

Hours worked x Hourly rate = Gross income

Look at the chart below. What is the gross income for the employee listed?

Employee Name	Hours Worked						Hourly Rate	Gross Income
	M	T	W	Th	F	Total		
Simon, Janet	8	7	10	4	6	?	$4.00	?

To find the amount, first total the number of hours the employee worked.

8 + 7 + 10 + 4 + 6 = 35

Next, multiply the number of hours worked by the employee's hourly rate.

35 x $4.00 = $140.00

The employee's gross income is $140.00

DEFINITION

*<u>Gross income</u> is total income without deductions.

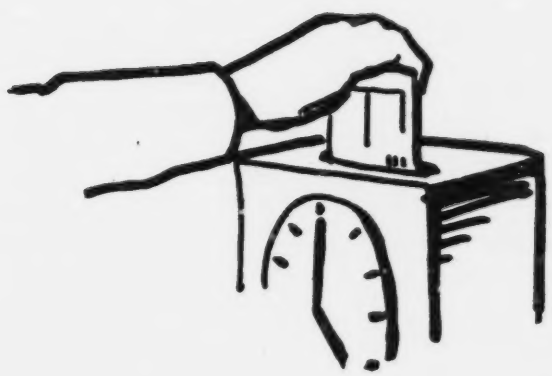
NOW YOU TRY IT

Practice Exercise C

Find the gross income for each employee listed below.

Remember: Hours worked x Hourly rate = Gross income

	Employee Name	Hours Worked M	T	W	Th	F	Total	Hourly Rate	Gross Income
23.	Baxter, A.	8	8	8	8	8	?	$4.75	?
24.	Colby, D.	7	6	8	10	9	?	4.25	?
25.	DeMille, C.	4	3	8	6	6	?	4.50	?
26.	Lopez, C.	5	6	5	6	5	?	4.00	?
27.	Mays, D.	11	8	6	8	9	?	3.94	?
28.	Saxton, H.	4.5	3.5	7.5	8.5	9	?	7.78	?



An accounting clerk/bookkeeper uses math to figure out the weekly gross income for employees paid by the piece.

EXAMPLE

Some employees are paid by the numbers of pieces on which they work. This is called piece work.

Look at the chart below. What is the gross income for the employee listed?

Employee Name	Pieces worked on M	T	W	Th	F	Total	Rate Per Piece	Gross Income
Klein, S.	92	101	98	92	110	?	$ .34	?

To find the gross income, first total the number of pieces worked on by the employee:

92 + 101 + 98 + 32 + 110 = 493

Next, multiply the number of pieces worked on by the rate per piece:

493 x $.34 = $167.62

The employee's gross income is $167.62.

NOW YOU TRY IT

Practice Exercise D

Find the gross income for each employee listed below.
Remember:
Pieces worked on x Rate per piece = Gross income

	Employee Name	Pieces Worked On M	T	W	Th	F	Total	Rate per Piece	Gross Income
29.	Peters, M.	110	105	101	59	98	?	$ .36	?
30.	Raymond, J.	62	71	53	41	70	?	$ .65	?
31.	Sima, B.	35	42	64	95	67	?	$ .98	?
32.	Tiyselo, J.	25	32	78	33	40	?	$ .75	?
33.	Unger, M.	112	95	103	115	92	?	$ .34	?
34.	Van, B.	31	23	30	27	29	?	$ .59	?

WHERE DOES AN ACCOUNTING CLERK/ BOOKKEEPER WORK?

As an accounting clerk/bookkeeper, you could work for many different companies. You could work for--

- a manufacturing company
- a retail store
- an insurance company
- a hospital
- a school
- a construction company
- a government agency

Where would you like to work?

As an accounting clerk/bookkeeper, you often will have contact with customers. You will talk with customers about mistakes on their bills. You will find out what the errors are and will make the necessary corrections. Sometimes, you may have to talk to customers who have not paid their bills. You will have to find out why the bills are not paid and when the customers can pay them.

You also will work with other accounting clerks/bookkeepers and a supervisor. Your supervisor will tell you what to do and help you solve any problems.

As an accounting clerk/bookkeeper, you will use many forms, business machines, and records. You will use--

- calculators to quickly add, subtract, multiply, and divide
- ledgers or account books to record business transactions
- invoices to prepare bills for customers
- vouchers that prove that a business transaction has taken place
- timesheets that show the time employees worked

As an accounting clerk/bookkeeper, you may do a variety of tasks and be called a general accounting clerk/bookkeeper. Or you may do only a few tasks. You may be--

- a payroll clerk. As a payroll clerk, you will verify the hours on time cards. You will calculate the amount that employees are to be paid.
- an accounts receivable clerk. You will keep track of customers' purchases. You will prepare bills and send the bills to customers. You will also record payments when they are received.
- an accounts payable clerk. As an accounts payable clerk, you will keep records on the amount of money your company owes others for materials, equipment, supplies, and services. You will check bills that are received to make sure they are correct. You will process the bills to make sure they are paid on time and you may prepare the checks to pay the bills.

IF YOU ARE INTERESTED IN

THE WORK OF AN ACCOUNTING CLERK/BOOKKEEPER

AND WOULD LIKE TO KNOW MORE,

READ ON

WHAT TRAINING, EDUCATION, AND EXPERIENCE DO YOU NEED TO BECOME AN ACCOUNTING CLERK/BOOKKEEPER?

To get a job as an accounting clerk/bookkeeper, you need to know how things in an office work. You need to know how to--

- operate office machines
- read and write
- spell and use proper grammar
- do arithmetic
- do paperwork neatly and without mistakes

While in high school, you should take courses in business arithmetic, bookkeeping, accounting, and office procedures. Knowing how to type and use a computer will also help you get a job.

Many employers require that accounting clerks/bookkeepers have advanced training beyond high school. You may want to get training at a community college, junior college, vocational training school, or business school.

In some states, accounting clerks/bookkeepers who work on tax returns must be licensed. Your state licensing agency can give you information on the licensing requirements for your state.

DO YOU WANT TO DO MORE ACCOUNTING CLERK'S/ BOOKKEEPER'S MATH?

Practice Exercise E

Find the missing amount in each of the following accounting equations.

	Remember: Assets	=	Liabilities	+	Owner's Equity
35.	$ 2,200	=	$ 197	+	$?
36.	18,475	=	6,072	+	?
37.	7,320	=	?	+	5,779
38.	22,694	=	9,455	+	?
39.	459	=	?	+	260
40.	39,112	=	?	+	17,062

Practice Exercise F

Find the total amount for each deposit shown below.

41.

CASH	CURRENCY	146	63
	COIN	199	80
LIST CHECKS SINGLY		1,172	50
		102	98
TOTAL FROM OTHER SIDE			
TOTAL			

42.

CASH	CURRENCY	162	79
	COIN	315	87
LIST CHECKS SINGLY		71	30
		5256	10
		923	85
TOTAL FROM OTHER SIDE			
TOTAL			

43.

CASH	CURRENCY	1,461	13
	COIN	1,149	16
LIST CHECKS SINGLY		1,356	27
		1,789	80
		1,870	07
TOTAL FROM OTHER SIDE			
TOTAL			

44.

CASH	CURRENCY	1,955	37
	COIN	1,800	00
LIST CHECKS SINGLY		4,072	81
		3,773	33
		5,622	02
TOTAL FROM OTHER SIDE			
TOTAL			

45.

CASH	CURRENCY	520	29
	COIN	1,220	30
LIST CHECKS SINGLY		1,353	92
		1,140	35
		1,356	72
TOTAL FROM OTHER SIDE			
TOTAL			

46.

CASH	CURRENCY	1,300	44
	COIN	1,262	35
LIST CHECKS SINGLY		1,583	16
		3,353	20
TOTAL FROM OTHER SIDE			
TOTAL			

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Practice Exercise G

Find the gross income for each employee listed below.

Remember:
Hours worked x Hourly rate = Gross income

	Employee Name	Hours Worked M	T	W	Th	F	Total	Hourly Rate	Gross Income
47.	Everett, S.	8	8	7	6	8	?	$3.94	?
48.	Farr, F.	3	5	6	4	7	?	4.00	?
49.	Gaines, J.	8	10	9	7	8	?	4.75	?
50.	Herbert, J.	11	9	8	8	10	?	4.25	?
51.	Innis, S.	6	8	7	7	4	?	3.75	?
52.	Jules, B.	12	13	10	9	10	?	5.00	?

Practice Exercise H

Find the gross income for each employee listed below.

Remember:
Pieces worked on x Rate per piece = Gross income

	Employee Name	Pieces Worked on M	T	W	Th	F	Total	Rate Per Piece	Gross Income
53.	Katz, A.	35	40	39	36	41	?	$ .97	?
54.	Lemur, L.	112	111	109	110	111	?	$ .64	?
55.	Mann, A.	78	81	83	79	80	?	$ .35	?
56.	Nix, J.	35	97	102	56	74	?	$ .98	?
57.	Oxley, B.	72	86	75	79	94	?	$ .74	?
58.	Putz, I.	102	116	109	121	135	?	$ .45	?

DO YOU WANT TO EXPLORE SOME MORE?

1. Make an appointment to talk to a Business and Office Education teacher at your school. Find out what courses you should take to prepare you for a position as an accounting clerk/bookkeeper.

2. Look in the newspaper for any job ads for accounting clerks/bookkeepers. What types of offices need accounting clerks/bookkeepers? How much do the jobs pay? What experience do you need to apply for the jobs? What special skills do you need?

3. Arrange to talk with two or three accounting clerks/bookkeepers. Ask them what tasks they perform on the job. Ask them about their training and experience. Ask them what things they like and dislike about their jobs.

4. Are you interested in other financial-related jobs?

   - Bank tellers cash checks, receive and record deposits and payments on loans, and record withdrawals.
   - Collection clerks receive and record payments such as checks and bank drafts.
   - Traffic-rate clerks compute freight rates, passenger fares, and other types of charges for transportation services.
   - Bookkeeping machine operators operate bookkeeping machines to record financial information. Their work is very similar to that of an accounting clerk/bookkeeper but is done on a machine.
   - Billing clerks prepare bills, invoices, and other statements of accounts.
   - Raters work for insurance companies and calculate the amount to be charged for various types of insurance.

   All of these workers use math in their work every day. They use addition, subtraction, multiplication, and division. Taking every chance to learn new skills and doing your work well will help you get a better job.

GLOSSARY

Asterisk (*):	a mark that tells you to look at the bottom of the page for the meaning, or definition, of the word.
Glossary:	a list of words with their meanings.
Budget:	a written plan that helps you spend your money or time wisely.
Calculator:	a machine used to figure out the answer to math problems.
Financial records:	papers, books, and reports having to do with money.
Gross income:	total income without deductions.

ANSWER SHEET

Practice Exercise A

1. $350
2. $280
3. $455
4. $200
5. $1,080
6. $1,375
7. $1,050
8. $1,110
9. $8,470
10. $2,745

Practice Exercise B

11. $236.25
12. $330.00
13. $411.00
14. $305.75
15. $1,011.18
16. $1,391.54
17. $1,988.01
18. $1,129.35
19. $3,675.36
20. $4,647.18
21. $3,856.16
22. $3,856.16

Practice Exercise C

23. 40, $190.00
24. 40, $170.00
25. 27, $121.50
26. 27, $108.00
27. 42, $165.48
28. 33, $256.74

Practice Exercise D

29. 473, $170.28
30. 297, $193.05
31. 303, $296.94
32. 208, $156.00
33. 517, $175.78
34. 140, $ 79.80

Practice Exercise E

35. $2,003
36. $12,403
37. $1,541
38. $13,239
39. $199
40. $22,050

Practice Exercise F

41. $1,621.86
42. $6,729.91
43. $7,626.43
44. $17,323.23
45. $5,601.58
46. $7,699.15

Practice Exercise G

47. 37, $145.781
48. 25, $100.00
49. 42, $199.50
50. 46, $195.50
51. 32, $120.00
52. 54, $270.00

Practice Exercise H

53. 191, $185.27
54. 553, $353.92
55. 401, $140.35
56. 364, $356.72
57. 406, $300.44
58. 583, $262.25